

Notice of Allowability

Application No.

10/668,262

Examiner

Thuy V. Tran

Applicant(s)

MITA, KAZUTOSHI

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment submitted 11/29/2004.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ The drawings filed on 09/24/03 w/replacement sheets 11/29/2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

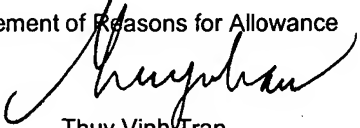
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12012004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.



Thuy Vinh Tran
Primary Examiner
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DETAILED ACTION

This is a response to the Applicant's amendment submitted on 11/29/2004. In virtue of this amendment, claims 1-18 are currently presented in the instant application.

Allowable Subject Matter

1. Claims 1-18 are allowed.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose or fairly suggest a high pressure discharge lamp lighting apparatus comprising an inverter controller for controlling the inverter according to its variable frequency oscillation function by selectively impressing a first frequency in a stable operation window free from causing acoustic resonance in the high pressure discharge lamp, and a second frequency higher than the first frequency to the inverter, and a time ratio controller for controlling a time ratio of an operation time at the first frequency and an operation time at the second frequency of the inverter controller so that the inverter output are alternately impressed to the high pressure discharge lamp at an adequate time at the first frequency and the second frequency, said time ratio being based on a lamp voltage of the discharge lamp detected in the steady lighting state using the lamp wattage detector, in combination with the remaining claimed limitations as called for in independent claim 1 (claims 2-18 are allowed since they are dependent on claim 1).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation of relevant prior art

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Qian et al. (U.S. Patent No. 5,914,572) discloses an improved discharge lamp driving circuit operated at two resonance modes.

Prior art Maechara et al. (U.S. Patent No. 5,063,490) discloses a regulated chopper and inverter with shared switches.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

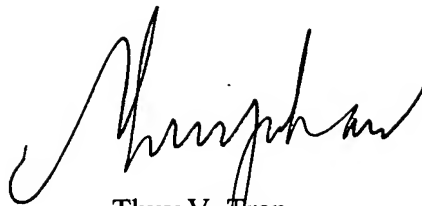
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Thuy V. Tran', with a large, stylized initial 'T'.

Thuy V. Tran
Primary Examiner
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12/27/2004